Qwest's current operational support systems (OSS) resulting from a Commission approved Batch Hot Cut Process be ordered by the Commission as regulatory change requests (CRs) for priority processing through Qwest's current Change Management Process (CMP). Staff recommends that the Batch Hot Cut Process undergo testing prior to its implementation, or at a minimum, prior to a Commission finding of no impairment in any New Mexico market. In addition, Staff recommends that the Commission order Qwest to address the implementation of new Performance Indicator Definitions (PIDs) through the Long Term PID Administration (LTPA) to track Qwest's Batch Hot Cut Process performance and that the Commission order corresponding changes to Qwest's New Mexico Performance Assurance Plan (QPAP) to ensure self-executing penalties for failure to meet performance standards.

In addition to the above general recommendations which are based on the undefined status of any Commission approved Batch Hot Cut Process, Staff makes a few specific recommendations regarding outstanding Batch Hot Cut Process issues.

Q. PLEASE DESCRIBE WHAT IS MEANT BY A "BATCH HOT CUT PROCESS" (BHCP).

A. A "hot cut" is the physical movement of a customers' phone line (loop) from one carrier's switch to placement on another carrier's switch (lift and lay). After the phone line has been transferred to the new switch, the customer's telephone

migration until they are fixed, or 3) giving the green light to move forward with migrations to meet the first migration phase where one-third of embedded UNE-P lines must be migrated.

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. Staff recommends the Commission set interim rates for any BHCP it approves subject to a permanent rate proceeding based on the Commission's determination regarding TELRIC based rates. Since the BHCP will be substantially untested, Staff recommends the Commission approve the BHCP on an interim basis and suspend final approval until some actual central office migration data is available from other states, or other actual BHCP test results as approved by the Commission. Staff also recommends that any changes to Qwest's OSS systems as a result of the BHCP be ordered as regulatory change requests through the Change Management Process and prioritized for completion in time for the FCC's mandated migration period. Also, Staff recommends that the Commission order Qwest to address the development and implementation of new PIDs through the LTPA in order to track Qwest's performance in administering the BHCP and ensure self-executing penalties for failure to meet performance standards in the QPAP.

Staff also has serious concerns with respect to Qwest's ability to migrate the volume of IDLC UNE-P lines during the 27 month FCC mandated migration period should a finding of no impairment be found in any Commission defined

market in New Mexico. Staff is also concerned that CLECs will face economic impairment issues should UNE-P IDLC lines be migrated through the more expensive Commission approved hot cut processes. Staff would prefer that line-shared loops be included in the BHCP if operationally and technically prudent. Lastly, Staff recommends that the Commission defer to states with higher volumes and similar BHC Processes in setting a maximum per central office limit and recommends that more specific costing information be provided to further analyze the minimum number in a batch for the BHCP.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

LIST OF PRE-FILED TESTIMONIES IN NMPRC CASE NO. 04-00404-UT

PARTY	TESTIMONY
Qwest	Direct Testimony of Bryon S. Watson Qwest Corporation, February 16, 2004
Qwest	Direct Testimony of Harry M. Shooshan III Qwest Corporation, February 16, 2004
Qwest	Direct Testimony of Nita A. Taylor on Behalf of Qwest Corporation, February 16, 2004
Qwest	Direct Testimony of Robert J. Hubbard Qwest Corporation, February 16, 2004
Qwest	Direct Testimony of William R. Easton Qwest Corporation, February 16, 2004
Qwest	Direct Testimony of Philip Linse Qwest Corporation, February 16, 2004
Covad	Direct Testimony of Michael Zulevic Filed on Behalf of Dieca Communications, Inc., D/B/A Covad Communications Company, February 9, 2004
AT&T	Direct Testimony of John F. Finnegan on Behalf of AT&T Communications of the Mountain States, Inc. ("AT&T") Policy and Introduction, February 16, 2004
AT&T	Direct Testimony of William H. Lehr and Lee L. Selwyn on Behalf of AT&T Communications of the Mountain States, Inc. Economic Considerations, February 16, 2004
AT&T	Direct Testimony of Arleen M. Staff on Behalf of AT&T Communications of the Mountain States, Inc. Establishing the Cross Over Point Between the Mass Market and the Enterprise Market, February 16, 2004
AT&T	Direct Testimony of Douglas Denney on Behalf of AT&T Communications of the Mountain States, Inc. DSP Cost Tool, February 16, 2004
AT&T	Direct Testimony of Michael R. Baranowske on Behalf of AT&T Communications of the Mountain States, Inc. Business Case, February 16, 2004
AT&T	Direct Testimony of Robert V. Falcone on Behalf of

LIST OF PRE-FILED TESTIMONIES IN NMPRC CASE NO. 04-00404-UT

	AT&T Communications of the Mountain States, Inc. Network Architecture, February 16, 2004
MCI	**Direct Testimony of Timothy J Gates Operational Impairment on Behalf of Worldcom, Inc. ("MCI"), February 16, 2004**
MCI	**Direct Testimony of Richard Cabe on Behalf of Worldcom, Inc. ("MCI"), February 16, 2004**
MCI	**Direct Testimony of Cedric Cox on Behalf of Worldcom, Inc. ("MCI"), February 16, 2004**
AARP	**Direct Testimony of Ben Johnson, Ph.D. Ben Johnson Associates, Inc. on Behalf of AARP, March 1, 2004**
New Mexico A.G.	**Direct Testimony of David Brevitz on Behalf of the New Mexico Attorney General, March 1, 2004**
NMPRC Staff	**Direct Testimony of Michael S. Ripperger, March 3, 2004**

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF IMPLEMENTATION OF A BATCH HOT CUT PROCESS	))	Case No. 03-00403-UT
		and
IN THE MATTER OF IMPAIRMENT IN ACCESS TO LOCAL CIRCUIT SWITCHING FOR MASS MARKET CUSTOMERS	)))))	Case No. 03-00404-UT

DIRECT TESTIMONY OF

BYRON S. WATSON

QWEST CORPORATION

FEBRUARY 16, 2004

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EXECUTIVE SUMMARY

My testimony addresses the question of whether competitive local exchange carriers (CLECs) can economically self-supply switching to serve mass market customers in specific geographic markets in New Mexico. This is fundamentally an empirical question, and the evidence from my analysis complements the evidence of existing competition presented by Qwest witness Nita Taylor to answer this question.[1] My analysis, which relies on a business case model called the CLEC Profitability Model (CPRO), demonstrates that an efficient CLEC can serve DS0-level mass market customers economically with self-supplied switching in two Metropolitan Statistical Areas (MSAs), containing 23 wire centers, in New Mexico. In these MSAs, my analysis shows that competitors are not impaired without access to unbundled circuit switching. Table 1 reports summary statistics of my analysis.

Table 1

Summary of *Baseline View* of the CPRO Model

MSA		NPV ($000)	Number of Wire Centers
Albuquerque	$	1,624	19
Santa Fe	$	194	4

CPRO simulates the financial performance of an efficient CLEC in a selected geographic area. As used in the table above, "NPV" refers to net present value. As I explain below in more detail, NPV is determined by estimating the likely revenues a CLEC would generate over a period of years and subtracting the likely costs over the same period. Among the numerous assumptions in CPRO that underlie the model's NPV results are three that are regulatory-related:

[1] Ms. Taylor presents evidence of where CLECs in New Mexico have deployed their own switches and are providing services to mass market customers.

1. Unbundled loops are available from the incumbent local exchange carrier (ILEC) at the current prices established by the New Mexico Public Regulatory Commission (the Commission);

2. Entrants can (and do) lease local transport (as either an unbundled network element (UNE) or special access); and

3. Entrants must self-supply switching.

CPRO uses geographically-specific information to determine where CLECs have opportunities to serve mass market customers economically without access to unbundled local switching. The results are based on actual transport distances and numbers of access lines in target wire centers and revenue and cost characteristics of an efficient CLEC. The model is a financial model developed on the Microsoft Excel platform. All calculations are transparent, and all inputs are user-adjustable.

Consistent with the Federal Communication Commission's (FCC) directive in the Triennial Review Order (TRO), CPRO is designed not to predict the financial performance of individual CLECs, but rather to evaluate whether an efficient CLEC can economically serve mass market customers without an ILEC's unbundled switching.[2] In this case, CPRO demonstrates that CLECs in New Mexico can serve mass market customers economically in significant portions of the state, and it does so with conservative assumptions that lend a high level of confidence to the model's results. I adopted conservative inputs specifically to increase the confidence in the simulation results. Even with this cautious approach, the model produces a positive business case in two New Mexico MSAs – Albuquerque, and Santa Fe.

[2] TRO ¶ 517.

Assuming the Commission adopts MSAs as the appropriate geographic market, Qwest is seeking findings of non-impairment and elimination of the unbundled switching requirement in these two MSAs. Consistent with this approach, the evidence Qwest has presented is generally limited to these MSAs served by Qwest.

Entry simulation begins with the creation of a *baseline view* of competitive entry by an efficient CLEC in the two New Mexico MSAs served by Qwest that have positive NPVs. The *baseline view* results from running the model with the baseline (*i.e.*, default) values for all inputs. Market quantities and prices are based on ILEC line counts and potential CLEC revenues. The CLEC enters this market with a UNE-loop (UNE-L) strategy, meaning that the CLEC supplies its own switching and leases unbundled loops and transport from Qwest. The model estimates the annual cash flows resulting from this entry strategy by combining: (1) volumes and prices for specific services; (2) network investment and operating costs for switching, transport, and collocation; and (3) loops and non-network costs. Based on the cash flow estimates, the model identifies where unbundled switching is not required for CLECs to compete economically for mass market customers. By focusing on MSAs, my analysis uses the same geographic market definition that Qwest witnesses Nita Taylor and Chip Shooshan use in their testimony.

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

PUBLIC VERSION

IN THE MATTER OF IMPLEMENTATION OF A BATCH HOT CUT PROCESS	))	Case No. 03-00403-UT
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IN THE MATTER OF IMPAIRMENT IN ACCESS TO LOCAL CIRCUIT SWITCHING FOR MASS MARKET CUSTOMERS	)))))	Case No. 03-00404-UT

DIRECT TESTIMONY OF

HARRY M. SHOOSHAN III

QWEST CORPORATION

FEBRUARY 16, 2004

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EXECUTIVE SUMMARY

My testimony provides guidance, from the perspective of sound public policy reasoning, for making decisions that are consistent with the *Triennial Review Order* ("*TRO*") and rationally related to the goals of the Telecommunications Act of 1996 ("the Act"). The overall objective of my testimony is to provide the appropriate framework under the FCC's *TRO* for analyzing where competition would be unimpaired without the unbundled switching requirement for serving residential and small business customers. Within this framework, I provide a summary of the evidence presented in greater detail by Qwest's witnesses in this proceeding demonstrating that competition is not impaired in the Albuquerque and Santa Fe Metropolitan Statistical Areas ("MSAs") in New Mexico.

In the *TRO*, the FCC made a national finding that the development of competition among firms providing switched local services to "mass market" customers (what the FCC calls those customers that are not "enterprise" customers) is impaired without the unbundled switching requirements. However, the FCC recognized that state-by-state granular analyses of this type of competition may render the national finding inapplicable and, accordingly, it instructed state commissions to conduct geographically-specific analyses of whether efficient competitors are impaired in specific areas without access to unbundled circuit switching for mass market customers.

Whatever flaws one might believe there are in the *TRO*, those issues are appropriately left up to the federal appellate court considering the *TRO* appeal. They should not be "re-litigated" in this proceeding. For purposes of this case, I recommend that this Commission make the findings required by the *TRO*. However, where there are ambiguities or internal inconsistencies in the

Order, the Commission should consider the principal policy objectives of the Act and relevant judicial opinions interpreting the impairment standard. Along these lines, Congress limited the unbundling requirement to cases where failure to provide the element would cause impairment. The Act and the various court decisions have made it clear that the FCC and the state commissions should limit the imposition of unbundling requirements to situations where it is clear that an efficient firm would not have a reasonable opportunity to succeed without the unbundling requirement. By adhering to these precedents, the Commission will help ensure that the statutory objectives are met and that the current process is a constructive one.

There are two "tracks" of inquiry that can lead to a finding of no impairment in a particular geographic market for local circuit switching serving mass market customers. Track One involves meeting either of two relatively objective triggers. The first trigger ("the self-provisioning trigger") is met if three or more competitors unaffiliated with one another or the incumbent use their own switches to serve mass market customers. The second trigger ("the wholesale trigger") is met if two or more wholesale providers offer unbundled local circuit switching. If the triggers are met, the FCC has made it very clear that the impairment inquiry ends. Track Two involves the analysis of the viability of additional competition that does not rely on unbundled local switching at TELRIC-based prices, including additional Competitive Local Exchange Carrier ("CLEC") entry and expansion and the competition from alternative sources, such as intermodal providers generally.

The step-by-step process for identifying the geographic areas where there is no impairment for local circuit switching serving mass market customers involves first determining the appropriate product (service) market that is served with the unbundled element at issue. The product market

for evaluating competition and impairment in this proceeding, therefore, includes the types of services that mass market customers purchase over POTS lines. These include, but are not restricted to, basic local service, vertical features, toll services, and all services that significant numbers of customers view as reasonable substitutes for these services. There is no preordained method for determining the scope of geographic markets, and the FCC offers very little guidance, other than declaring that a market cannot include an entire state, but must be large enough to allow the CLEC to take advantage of scale economies. The simplest, and perhaps most obvious, guiding principle for establishing geographic markets is that the scope of the market should be determined based on the best available information.

The key to determining the appropriate geographic markets is the selection of a method for aggregating wire centers. An aggregation of wire centers that is based upon the ability of efficient competitors to provide service over their own switches to mass market customers meets both the economic and practical requirements for defining an appropriate geographic market. Given the circumstances in New Mexico, aggregating wire centers by MSA makes sense from economic and practical perspectives. MSAs are: (1) granular enough to include areas with similar cost and revenue characteristics; (2) broad enough to allow competitors to capture economies of scale; (3) reasonable areas for looking at actual and potential competition; and (4) structured such that wire centers generally fit neatly within their borders.

In addition to addressing the market definition, this Commission must identify the "crossover point" for determining whether a customer is a mass market or an enterprise customer. The FCC finds that customers taking four or more DS0 loops could be served in a manner similar to that described above for enterprise customers—that is, voice services provided over one or several

DS1s. In the absence of "significant evidence to the contrary," I believe the Commission should adopt the FCC's cutoff of three lines and below as the demarcation of the mass market.

Qwest presents compelling evidence that efficient competitors are not impaired in many areas in New Mexico without access to unbundled circuit switching for mass market customers. In total, Qwest provides evidence that CLECs are not impaired in the Albuquerque and Santa Fe MSAs. The evidence of broad deployment of existing CLEC switches is supported by a business case analysis presented by Mr. Watson that demonstrates the potential for CLEC competition in these two MSAs. Qwest presents evidence that there is sufficient existing and potential competition to satisfy the FCC's Track Two requirements for a finding of no impairment.

Assuming the Commission adopts MSAs as the appropriate geographic market, Qwest is seeking findings of non-impairment and elimination of the unbundled switching requirement in these two MSAs. Consistent with this approach, the evidence Qwest has presented is generally limited to these two MSAs. If the Commission determines that an area other than an MSA is the appropriate geographic market, the Commission should remove the unbundling requirements for Qwest in the largest geographic areas wherein it finds that competition would not be impaired. It would also be appropriate to consider additional areas for non-impairment.

For areas where there is no economic impairment related to mass market switching, the FCC directs states to determine if there is operational impairment. Operational concerns listed by the FCC include difficulties in obtaining loops, collocation space and cross-connects from an incumbent LEC. The FCC, however, also recognizes that an operational problem only causes impairment directly when there is no practical operational solution. Qwest has been engaged in a collaborative process with CLECs to resolve any reasonable concerns the CLECs may have with

certain operational processes. Mr. Hubbard explains that obtaining collocation space and cross-connects does not pose a significant problem for CLECs in New Mexico.

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	)	and
IN THE MATTER OF IMPAIRMENT IN ACCESS TO LOCAL CIRCUIT SWITCHING FOR MASS MARKET CUSTOMERS	)	Case No. 03-00404-UT

DIRECT TESTIMONY OF

NITA A. TAYLOR

ON BEHALF OF

QWEST CORPORATION

February 16, 2004

EXECUTIVE SUMMARY

My testimony establishes that facilities-based CLECs are now using their own switches to serve mass market local exchange customers in New Mexico at a level sufficient to meet the FCC's Triennial Review Order (TRO) "Track 1" self-provisioning trigger analysis in Albuquerque. Based on information available to Qwest from its own wholesale billing systems and the CLEC self-reported information drawn from the Local Exchange Routing Guide (LERG), it is clear that at least three unaffiliated CLECs are now serving mass market customers with their own switches in the Albuquerque metropolitan statistical area (MSA) (consisting of 19 wire centers). In addition, Qwest's evidence establishes that at least one facilities-based CLEC is now serving mass market customers with its own switch in the Santa Fe MSA. In paragraph 462 of the TRO, the FCC states:

> Where a state determines that there are three or more carriers, unaffiliated with either the incumbent LEC or each other, that are serving mass market customers in a particular market using self-provisioned switches, the state must find "no impairment" in that market.

Also, as the FCC emphasized in a brief relating to the TRO that it recently filed with the United States Court of Appeals for the District of Columbia:

> [We] made clear that where the triggers are not met, the presence of even one self-provisioning competitor in a market will increase the likelihood of a finding of no impairment..."[t]he existence of even one such switch might in some cases justify a state finding of no impairment, if [the state] determines that the market can support multiple, competitive supply."[1]

[1] Opposition of Respondents to Petitions for a Writ of Mandamus, *United States Telecom Association v. FCC*, Nos. 00-1012 et al., p. 23. (October 9, 2003).

There are three concepts central to this directive from the FCC. First, the scope of the market must be defined to allow for an analysis of competitive data within a relevant geographic area. In paragraph 495 of the TRO, the FCC provides guidance as to how geographic markets should be defined, stating that state Commissions should not define markets so broadly as to encompass an entire state but also should not define them so narrowly that "a competitor serving that market alone would not be able to take advantage of available scale and scope economies from serving a wider market." For the reasons outlined in the testimony of Mr. Shooshan, MSAs should be used to establish appropriate geographic boundaries around the relevant market for purposes of this docket.

Second, a definition of the product market related to "mass market" customers must be established to allow an examination of evidence of facilities-based CLEC competition in that specific market. In the TRO, the "mass market" refers not only to residential customers but also to business customers that do not use DS1 capacity facilities. In paragraph 497 of the TRO, the FCC recognizes that "at some point, customers taking a sufficient number of multiple DS0 loops could be served in a manner similar to that described for enterprise customers." The FCC states further that "we expect that in those areas where the switching carve-out was applicable, the appropriate cutoff will be four lines absent significant evidence to the contrary. We are not persuaded, based on this record, that we should alter the Commission's previous determination on this point." As more fully explained in Mr. Shooshan's testimony, Qwest recommends for this proceeding that the Commission continue to follow the FCC's guidelines in defining "mass market" customers as those served by no more than three DS0 loops at a location.

Finally, pursuant to the guidelines in paragraph 462 of the TRO, a state Commission must determine whether three or more unaffiliated CLECs are providing local exchange service to mass market customers with their own switching within the area the Commission

defines as the market. Qwest's evidence that at least three CLECs are providing local exchange service to mass market customers with their own switches in the Albuquerque MSA supports non-impairment findings with respect to this market and eliminates any need for the Commission to conduct Track 2 analyses there.

Further, I present detailed evidence in Highly Confidential Exhibit NAT-4HC showing that specific CLECs in each MSA are active in the mass market. This exhibit is based upon: (1) information from the LERG showing CLECs with voice-type switches that are serving specific areas of the New Mexico market; (2) Qwest wholesale billing records relating to these same CLECs that show where the CLECs have collocation arrangements; and (3) Qwest wholesale billing records establishing where these CLECs are purchasing mass market unbundled loops from Qwest (defined as from one to three unbundled loops terminating at a customer's location). The exhibit also includes CLECs that are providing mass market local exchange service via CLEC-owned loops. To the extent additional CLECs are serving mass market customers with CLEC-owned loop facilities or with switches not defined specifically as voice switches, such as "soft switches" or packet switches, this exhibit understates the actual level of competition in the mass market in New Mexico. The evidence available to Qwest shows that the number of unaffiliated CLECs serving mass market customers via CLEC-owned switches in the Albuquerque MSA is four.

In Albuquerque, the number of unaffiliated CLECs serving the mass market is above the threshold level of three established by the FCC and supports a finding of non-impairment in this geographic area. I present additional evidence in Highly Confidential Exhibit NAT-4HC that at least one facilities-based CLEC is also actively serving mass market customers via its own switch in the Santa Fe MSA. However, the evidence of actual switch deployments in Santa Fe, coupled with business case analysis presented by Mr.

Watson and the economic framework presented by Mr. Shooshan establishes that CLECs can economically provide their own local switching in the Santa Fe MSA and that there is, therefore, no impairment there.

Additionally, I provide a discussion of "intermodal" wireless and Voice over Internet Protocol (VoIP) telephony competition. In paragraph 97 of the TRO, the FCC states "the fact that an entrant has deployed its own facilities - regardless of the technology chosen - may provide evidence that any barriers to entry can be overcome....This approach is consistent with USTA's admonition that we should consider intermodal competitors as relevant to our analysis." In addition, in discussing evidence of impairment at page 10 of the TRO the FCC states, "In particular, we are interested in evidence concerning whether new entrants are providing retail services in the relevant market using non-incumbent LEC facilities. *We also give weight to the deployment of intermodal technologies."* (emphasis added). While the "three CLEC trigger" is met in the Albuquerque MSA, intermodal competition is also now impacting Qwest's local exchange customer base in all MSAs in the state and should be considered as additional evidence of facilities-based competition in New Mexico. Wireless coverage is now expansive in New Mexico and at least 12 unaffiliated wireless providers are now offering service within the Qwest service territory. Given the attractive pricing and packaging of wireless offerings and the mobility of wireless service, many customers are now substituting wireless service for traditional Qwest wireline service. Also, as of November 2003, customers in the 100 largest MSAs nationwide, including Albuquerque, are able to keep their preexisting telephone number when changing from the service of one wireless provider to another and may also retain their preexisting Qwest wireline number when electing to substitute wireless for Qwest's wireline local exchange service. This new availability of "number portability" for wireless service will increase even further the pace of competition between wireless and wireline services.

Finally, I establish in my testimony that at least four unaffiliated vendors are now offering VoIP telephony service in New Mexico. This service merely requires a broadband Internet connection at the customer's location, and the VoIP provider delivers a "plug and play" device to the customer that is easily connected to the broadband connection. The VoIP services are typically priced as a package and include a range of features and unlimited local and long distance calling. Providers of VoIP services are not currently classified as CLECs and are not currently subject to regulation as telephony service providers. While VoIP service is another intermodal form of mass market competition now present in New Mexico, providers of these services are not included in my assessment of competition with respect to the mass market switching triggers. The presence of these providers in New Mexico, however, further demonstrates that intermodal competition in the state is robust.

The level of facilities-based CLEC competition in the mass market in the Albuquerque MSA clearly exceeds the threshold established in the TRO and supports a finding of non-impairment in this market. Additionally, intermodal competition in Albuquerque is now clearly present and should provide the Commission assurance that competitive options for mass market customers beyond services offered by traditional CLECs are available. Accordingly, I recommend that the Commission make findings of non-impairment with respect to mass market local switching in the Albuquerque MSA based on the FCC's "Track 1" trigger analysis. In addition, I recommend non-impairment findings in the Santa Fe MSA where the Track 1 trigger is not met but where competition nonetheless exists and there is no economic impairment that prevents the development of further competition (commonly referred to as the "Track 2" analysis). This Track 2 analysis is discussed further in the testimony of Mr. Shooshan and Mr. Watson.

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF IMPLEMENTATION OF A BATCH HOT CUT PROCESS	))	Case No. 03-00403-UT
		and
IN THE MATTER OF IMPAIRMENT IN ACCESS TO LOCAL CIRCUIT SWITCHING FOR MASS MARKET CUSTOMERS	)))))	Case No. 03-00404-UT

DIRECT TESTIMONY OF

ROBERT J. HUBBARD

QWEST CORPORATION

FEBRUARY 16, 2004

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the Network Planning Department as an outside plant planner, in which I planned for future jobs involving fiber cable placement and upgrades to the existing outside plant network. In 1997, I moved into my present job as a Director in the Interconnection Planning Department, where I am responsible for ensuring compliance with the Telecommunications Act and federal and state regulations and where I also continue to be involved in maintaining the integrity of Qwest's network. My responsibilities include providing litigation support before the Federal Communications Commission ("FCC") and state commissions on issues relating to network elements and architectures for wireline networks. In addition, I represent Qwest in the Network Reliability and Interoperability Council ("NRIC"), a body created by the FCC, to address the reliability and interoperability of wireline networks, broadband, and emerging cyber-networks. Specifically, I currently serve on an NRIC committee addressing issues relating to broadband within the United States.

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. Under the Triennial Review Order ("TRO"), if the New Mexico Public Regulation Commission ("Commission") finds that the competitive triggers are not satisfied in a particular market, the Commission must then consider whether CLECs could economically enter that market, including ascertaining whether certain operational barriers would prevent them from doing so. The FCC directed the Commission to consider three specific operational issues:

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> In evaluating whether to find that requesting carriers are not impaired without access to local circuit switching, notwithstanding a market's failure to satisfy the triggers described above, . . . states must consider the role of potential operational barriers, specifically examining whether [(1)] incumbent LEC performance in provisioning loops, [(2)] difficulties in obtaining collocation space due to lack of space or delays in provisioning by the incumbent LEC, and [(3)] difficulties in obtaining cross-connects in an incumbent's wire center, are making entry uneconomic for competitive LECs.[1]

The standard for evaluating these three operational issues is *not* simply whether CLECs face some kind of difficulty with respect to these matters, but rather whether any difficulties are so great that they actually render entry "uneconomic."[2]

The first of these three potential operational barriers — loop provisioning, which includes hot cut issues — is the subject of a separate multistate collaborative, and separate testimony on that issue was filed January 23, 2004. This testimony addresses the other two issues: collocation and CLEC-to-CLEC cross-connects. Qwest's performance today with respect to both is demonstrably outstanding, and there is no reason to expect either to present a problem if unbundled mass-market switching is no longer available.

With respect to collocation, as described below, Qwest is currently meeting fully 100% of its installation commitments in New Mexico and has consistently done so for the past two years, regardless of how many collocation arrangements CLECs have ordered. Qwest has ample physical collocation space available with only two of its 65 central offices facing any kind of space constraint today. These two offices are scheduled for additional construction to relieve the current space

[1] TRO ¶ 507
[2] *Id.*

constraint. Moreover, CLECs still have the opportunity to obtain interconnection distribution frame ("ICDF") and virtual collocation in these offices before this construction is finished. Qwest does not expect to have any difficulty providing collocation in the future if UNE-P becomes unavailable, in large part because Qwest offers collocation options (like ICDF, virtual collocation and shared space collocation) that require extremely little space inside the central office.

CLEC-to-CLEC cross-connects do not present any potential operational impairment either. Qwest permits CLECs to provision cross-connects with each other on the CLEC side of the ICDF without any involvement by Qwest whatsoever, and without having to give Qwest any notice of their activities. In this situation, Qwest has no way of tracking the exact number of such CLEC-to-CLEC cross-connects.[3] Qwest's SGAT does permit CLECs to ask Qwest to install these cross-connects. However, Qwest has not provisioned any cross-connects in New Mexico pursuant to such CLEC request. Qwest has never received a single CLEC complaint anywhere in its region about its provisioning of CLEC-to-CLEC cross-connects.

III. COLLOCATION AVAILABILITY

Q. WHAT DID THE FCC STATE WITH RESPECT TO COLLOCATION AVAILABILITY AS A POTENTIAL OPERATIONAL IMPAIRMENT?

[3] But see CLECs privileged response to New Mexico Public Regulation Commission data request #15. This data request asks for CLECs that purchase up to 24 voice grade equivalent lines to provide the number of CLEC-to-CLEC cross-connects they have performed in New Mexico since June 2001. In addition, CLECs are requested to provide the number of CLEC-to-CLEC cross-connects they currently maintain in New Mexico.

A. No. As stated, Qwest has no record of complaints about CLEC-to-CLEC cross-connects anywhere in its 14-state region. This is not surprising given that the procedure for making CLEC-to-CLEC cross-connects available was negotiated with the CLECs in the section 271 process. As stated above, the process gives CLECs the opportunity to perform this work for themselves. For this reason, the success of the product usually is placed squarely on the CLECs.

Q. CAN YOU PLEASE SUMMARIZE YOUR TESTIMONY ON THE AVAILABILITY OF CLEC-TO-CLEC CROSS-CONNECTS IN NEW MEXICO?

A. Yes. Qwest has demonstrated that it offers two different types of CLEC-to-CLEC cross-connects to CLECs in New Mexico. In both instances, CLECs have the ability to perform the work for themselves without any involvement by, or notice to, Qwest. The process for making these connections available was created with CLEC input during the section 271 process. To date, no CLEC has issued any type of complaint about the process. In sum, CLEC-to-CLEC cross-connect issues do not present any arguable operational impairment for CLECs in the state of New Mexico.

V. CONCLUSION

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF IMPLEMENTATION OF A BATCH HOT CUT PROCESS	))	**Case No. 03-00403-UT**
		and
IN THE MATTER OF IMPAIRMENT IN ACCESS TO LOCAL CIRCUIT SWITCHING FOR MASS MARKET CUSTOMERS	)))))	**Case No. 03-00404-UT**

DIRECT TESTIMONY OF

WILLIAM R. EASTON

QWEST CORPORATION

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services. In this role I work extensively with the Product Management, Network and Costing organizations.

Q. HAVE YOU TESTIFIED PREVIOUSLY IN NEW MEXICO?

A. Yes I have. I have testified previously in Case Nos. 96-107-TC, 96-168-TC, 96-310-TC and 3495.

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide an overview of several Qwest product offerings available to CLECs. Specifically, I will discuss Unbundled Switching, Unbundled Network Element – Loop (UNE-L) and Resale product offerings. I will also describe the process that Qwest and CLECs will use to transition away from existing Unbundled Network Element – Platform (UNE-P) products when this Commission finds that there is no impairment related to mass market switching. I recommend that the Commission make a finding of non-impairment with regard to mass market switching in those geographic markets specified by Qwest witnesses Taylor and Shooshan.

III. UNBUNDLED SWITCHING AND UNE-P PRODUCTS

Q. HOW DO CLECS GAIN ACCESS TO UNBUNDLED SWITCHING TODAY?

A. Qwest's CLEC customers typically gain access to unbundled switching through the use of UNE-P, a combination of UNEs that includes unbundled local circuit switching, an unbundled loop, and shared transport. UNE-P allows the provisioning of services that are functionally equivalent to Qwest's comparable retail service offerings. For example,

L provisioning processes to make the desired conversion. Qwest filed separate testimony on the issues discussed in the multi-state batch hot cut forum on January 23, 2004.

VII. CONCLUSION

Q. WHAT IS YOUR RECOMMENDATION?

A. I recommend the Commission make a finding of non-impairment with regard to mass market switching in the markets specified in the testimony Qwest witnesses Taylor and Shooshan. I also recommend that the Commission adopt and approve the batch hot cut process described in the Batch Hot Cut testimony filed by Qwest.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF IMPLEMENTATION OF A BATCH HOT CUT PROCESS	)	Case No. 03-00403-UT
		and
IN THE MATTER OF IMPAIRMENT IN ACCESS TO LOCAL CIRCUIT SWITCHING FOR MASS MARKET CUSTOMERS	)	Case No. 03-00404-UT

DIRECT TESTIMONY OF

PHILIP LINSE

QWEST CORPORATION

FEBRUARY 16, 2004

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I. INTRODUCTION

Q. PLEASE STATE YOU NAME AND ADDRESS.

A. My name is Philip Linse. My business address is 700 West Mineral Avenue, Littleton, Colorado 80120.

Q. WHAT IS YOU CURRENT BUSINESS AFFILIATION?

A. I am employed by Qwest Corporation ("Qwest") as a Director, Technical Regulatory in the Local Network Organization.

Q. WHAT IS YOUR BACKGROUND?

A. I received a Bachelors degree from the University of Northern Iowa in 1994. I began my career in the telephone communications industry in 1995 when I joined the engineering department of CDI Telecommunications in Missoula, Montana. In 1998, I accepted a position with Pacific Bell as a Technology planner with responsibility of analyzing network capacity. In 2000, I accepted a position with U S WEST as a Manager, Tactical Planning. In 2001, I was promoted to a staff position in Technical Regulatory, Interconnection Planning for Qwest. In this position, I developed network strategies for interconnection of unbundled Switching, Signaling System 7 and other switching-related products. In addition, I provided network evaluation of new technologies and represented the network organization as a subject matter expert. In 2003, I was promoted to my current position as Director of Technical Regulatory in the Network organization.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to show that CLECs can utilize modern telecommunications transmission and switching technologies to provide service to mass market customers without recourse to unbundled switching.

II. SWITCH FUNCTIONALITY, CAPACITY AND AVAILABILITY

Q. WHAT IS A TELECOMMUNICATIONS SWITCH, AND WHAT ARE ITS PRINCIPAL FUNCTIONS?

A. A modern telecommunications switch is a digital electronic system designed to make connections between people who want to communicate with each other. It is essentially a special-purpose computer that has telephone lines connected to it. Its principal functions are to:

- Detect that someone wishes to make a call (provide dial tone);
- Determine who the customer wants to call (detect and analyze the numbers dialed);
- Connect the call to the proper destination (another telephone line or a trunk line to another switch);
- Notify the recipient that he or she is being called (ring the telephone or signal the next switch);
- Determine when the called line has answered;
- Monitor the call to determine when the customer has terminated the call; and
- Take down the connection.

There are obviously many additional functions, such as billing and provision of ancillary service, and much technical detail about issues such as interfaces, maintenance and

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DIRECT TESTIMONY OF

MICHAEL ZULEVIC

FILED ON BEHALF OF

DIECA COMMUNICATIONS, INC.,

D/B/A COVAD COMMUNICATIONS COMPANY

February 9, 2004

II. INTRODUCTION: PURPOSE AND OVERVIEW OF TESTIMONY

Q: WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A: The purpose of this testimony is to describe why and how there are operational, economic, and competitive factors that would impair competitive providers in serving the mass market if forced to use UNE-L, and to outline the significant, ongoing operational and business obstacles Covad faces as it attempts to partner with UNE-P voice providers to offer a bundled voice and data product in New Mexico. As it relates to the triggers and factors discussed by the FCC in the TRO with respect to unbundled switching ("UBS") for the mass market, the operational impediments and issues I describe in my testimony are those that must be taken into account when the Commission decides whether competitors really can provide service successfully using a UNE-L strategy.

Q. WHAT IS THE GENESIS OF YOUR TESTIMONY?

A. In its Triennial Review Order, the FCC made a national finding that CLECs are "impaired" without access to unbundled local switching when providing service to the mass market. (TRO, ¶ 419). The FCC's impairment determination was grounded in economic and operational factors – largely stemming from existing hot cut processes -- that demonstrated, to the FCC's satisfaction, that impairment exists without access to UBS. (TRO, ¶¶ 461-484). The FCC entertained the possibility, however, that there may be certain situations in particular geographic areas where there would be no impairment without access to UBS. Accordingly, the FCC directed the state commissions, upon petition by a party seeking to overturn the impairment finding, to consider certain economic and operational

criteria in determining whether to reverse the national finding of impairment based on those state-specific factors.

Here, Qwest is challenging the finding that CLECs are impaired without access to UBS. My testimony is designed to illuminate for the Commission the need to retain UBS unless and until Qwest corrects the operational, economic, and competitive issues that arise in the context of a UNE-L delivery strategy and the associated hot cut procedures that must underlie the UNE-L delivery strategy.

III. UBS IMPAIRMENT AND DATA SERVICES

Q: WHAT ARE THE FACTORS THAT THE FCC IDENTIFIED WHEN FINDING THAT CLECS ARE IMPAIRED WITHOUT ACCESS TO UBS?

A: The FCC described a number of economic and operational factors that create sufficient barriers to entry such that access to UBS is required. In other words, when considering whether CLECs should be required to provide service via a UNE loop (UNE-L) and their own switching facilities, rather than the more operationally efficient and cost-effective UNE platform (UNE-P), which uses the ILEC switch (which is what, after all, this proceeding is about), the FCC identified factors that shed light on whether or not CLECs are impaired without access to UBS. Among other things, the FCC identified Qwest's performance in provisioning loops as a factor impacting the UBS impairment analysis.[1]

[1] Notably, it appears that the FCC did not intend to limit the Commission to looking at just these barriers, because the market definition analysis requires the Commission to look at things like (1) the variation in factors affecting a CLEC's ability to serve each group of customers; and (2) competitors' ability to specifically target and serve markets profitably and efficiently using currently available technologies. Presumably, while the FCC identified a number of "impairment" factors, such factors must also be considered relative to the other factors the FCC identified as being relevant to the definition of the market.

Q. WHAT ADDITIONAL PROBLEMS DO YOU SEE WITH QWEST'S PROPOSED BATCH HOT CUT PROCESS?

A. Qwest explained in its original batch hot cut proposal that the cost reduction anticipated by its proposed batch hot cut process is based on the elimination of both pre-wiring and pre-testing of the lines to be cut. The removal of these steps made no sense to me given my many years of involvement with large customer hot cuts. In fact, the performance of these functions in advance decreases the amount of time taken on the day of cut as potential day-of-cut problems can be addressed in advance and worked in conjunction with the normal work process. By not doing the pre-test and pre-wiring, the only thing that will be ensured is that adverse customer impacts would be commonplace. Qwest has recently revised its position on pre-wiring and pre-testing but the impact on rates is still unknown.

Q: YOU'VE DISCUSSED THE OPERATIONAL ISSUES ASSOCIATED WITH QWEST'S LINE SPLITTING AND LOOP SPLITTING MIGRATION PROCESSES. ARE YOU ALSO ADDRESSING COST ISSUES?

A. Not specifically at this time (although I have addressed some of the cost-related issues raised by Qwest in its attempt to eliminate data from the hot cut process). However, I reserve the right to comment on the cost of the hot cut processes once I have seen Qwest's final BHC proposal and the associated proposed rates.

Q. WHAT CONCLUSIONS SHOULD THE COMMISSION DRAW FROM YOUR TESTIMONY?

A: The ultimate goal of competition is to give customers choices of providers, innovative services, and competitive prices. Qwest's current "process" for UNE-P

line splitting customers to UNE-L loop splitting customers ensures a difficult, if not horrific, customer service experience. Unless Qwest develops, tests, and implements a process to perform hot cuts to migrate efficiently and economically a UNE-P line splitting arrangement to a UNE-L loop splitting arrangement, Covad and its voice partners are impaired without access to UBS. Accordingly, until this Commission approves a hot cut and batch hot process for voice plus data loops that is sufficient to eliminate such impairment, unbundled local switching for the mass market customers cannot be eliminated as a UNE when UBS is used to provision a line splitting arrangement. The Commission thus should follow the lead of the Public Utilities Commission of the State of California, when it recognized in its December 2, 2003, ruling that if SBC and Verizon do not develop a process to migrate line shared and line split loops with ILEC switching to line splitting arrangements with CLEC switching [i.e., UNE-L loop splitting], CLECs *may be* entitled to unbundled ILEC switching in line splitting arrangements even if the California Commission determines that CLECs are not entitled to unbundled ILEC switching in voice-only arrangements (per the impairment analysis required by the Triennial Review Order). *See* Exhibit MZ-8, p. 10.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. This concludes my Direct Testimony, however, I anticipate filing all responsive testimony permitted by the Commission, and being presented for cross examination at the hearing on the merits.

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF IMPLEMENTATION OF A BATCH CUT PROCESS	)	Case No. 03-00403-UT

AND

IN THE MATTER OF IMPAIRMENT IN ACCESS TO LOCAL CIRCUIT SWITCHING FOR MASS MARKET CUSTOMERS	)	Case No. 03-00404-UT

DIRECT TESTIMONY

OF

JOHN F. FINNEGAN

ON BEHALF OF

AT&T COMMUNICATIONS OF THE MOUNTAIN STATES, INC. ("AT&T")

POLICY AND INTRODUCTION

February 16, 2004

and evaluating Qwest's operational support system ("OSS") and developing performance measurements supporting those OSS. Since the issuance of the Triennial Review Order, I have been concentrating my efforts on the cross over point, market definition and trigger issues that are relevant to this testimony and the batch hot cut process.

I was AT&T's representative in the Arizona and the Regional Oversight Committee's ("ROC") OSS tests since their inception. I am a frequent panelist on ROC OSS and Triennial Review Order discussions, and have testified in proceedings in Kansas, Iowa, Minnesota, Arizona, Montana, Wyoming, Utah, Idaho, Colorado, Washington, North Dakota, South Dakota, Nebraska, Oregon, and New Mexico.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I am here today to provide the New Mexico Public Regulation Commission ("Commission") with an introduction to the FCC's *Triennial Review Order* ("*TRO*"), and to provide the policy framework supporting the need for continued availability of mass market switching at TELRIC prices, as part of the unbundled network element platform ("UNE-P"). My testimony is divided into three (3) sections: first, an introduction to and explanation of the *TRO*; second, a discussion of the public interest benefits of UNE-P; and third, an explanation of the "triggers" analysis required under the *TRO*.

market is."[231] Moreover, the FCC found that evidence that competitors using their own switches for other purposes have not converted them to serve mass market customers bolsters its findings that significant barriers make use of CLEC switching to serve such customers uneconomic.[232] Thus, any notion that the trigger analysis is simply a matter of counting switches, particularly those switches used to serve the enterprise market, must be soundly rejected.

E. CONCLUSION

Q. WHAT ARE YOUR CONCLUSIONS WITH RESPECT TO THE TRIGGER ANALYSIS?

A. There are several. First and foremost, the trigger analysis is intended to determine whether and to what extent there are *actual and effective* alternatives to the switching capability of the RBOC, in this case Qwest. This does not mean merely counting switches. Instead, it requires that the Commission familiarize itself with the facts that give rise to CLECs' economic and operational impairment in New Mexico, and exercise appropriate discretion in applying the *TRO's* guidelines to develop the quantitative and qualitative criteria necessary to determine which alternative switching sources should be considered in the trigger analysis. It also means performing a granular analysis, to look at "actual deployment," i.e., the places and customers that a CLEC *currently* serves. as opposed to mere potentiality. That actual deployment must include service to both residential and business customers, and not the mere presence of a switch serving one class of

[231] *Id.* (emphasis added)
[232] *Id.* n. 1365 & n. 1371.

customers but not the other. In addition, the qualified provider (whether a self-provider or a wholesaler) must be actually serving the *entire* geographic at issue, and not just a subset of that market. And lastly in this regard, the Commission must assure itself that the trigger analysis has produced a rational and lasting pro-competitive result. The triggers will be met only where the defined area already supports multiple, active competitors using non-ILEC switching to serve the mass market, under circumstances that can be expected to continue for the indefinite future, without losing the competitive gains made to date. A fundamental concern, and potential danger, is that the elimination of unbundled mass market switching will reverse the progress of competition, and force CLECs to exit the market.

V. OVERALL CONCLUSION

Q. WHAT ARE YOUR OVERALL CONCLUSIONS?

A. During the course of my testimony I have first tried to provide a brief synopsis of the *TRO*, and essentially give the Commission a roadmap to follow in conducting these proceedings. I have also provided an overview of the Commission's critical role in the process of examining whether—as the FCC has found nationally—CLECs are impaired in their attempts to enter the market here in New Mexico, without the continued availability of ILEC-provided mass market switching, priced at TELRIC rates. I have explained that such impairment is determined by means of a two-step process, *i.e.*, an actual usage test (called a trigger analysis) and a potential deployment test. Both of these tests, however, are ultimately intended to answer the exact same question: whether mass market customers in

the defined markets will be able to obtain competitive services from multiple suppliers.

Secondly, I have described the "unbundled network element platform" (or "UNE-P") in terms of a) its role in fostering and developing local exchange competition, b) the tangible economic benefits which it brings to consumers, and c) its promotion of investment by CLECs and ILECs alike. I conclude that the capability of UNE-P to bring competition quickly to a wide-spread area is absolutely unparalleled among the available avenues for local market entry. There is, quite simply, no other method an entrant can use which will allow entry in a broad geographic market quickly and effectively. In addition, the benefits to consumers resulting from UNE-P entry are clear, and have been independently documented: an increased number of choices among providers, a broader selection of offers from each provider, competitive response from the ILECs, and, most importantly, falling prices. In short, UNE-P provides *real* competition and *real* consumer benefits. Moreover, contrary to the claims of the ILECs, the available data demonstrates that UNE-P stimulates investment by the Bells and new entrants alike. In fact, the great irony of the ILECs' argument against UNE-P is that they have absolutely no economic reason to promote more facilities-based competition to their monopolies. They fully understand that UNE-P is a stepping stone to investment in infrastructure, and they hope to remove it, and replace it with a stumbling block.

Thirdly, I have examined the notion of defining a "geographic market" for purposes of this impairment analysis. I conclude that it is useful to think of the

geographic market as an "impairment evaluation zone," because that is the singular purpose to which they will be put. The factors to be used in establishing these zones is expressly set out in the *TRO*, and include, *inter alia*, the locations of customers actually being served (if any) by competitors, the variation in factors affecting competitors' ability to serve each group of customers, and competitors' ability to target and serve specific markets economically and efficiently using currently available technologies. I also conclude that establishing these zones will be a dynamic and fact-intensive process, in which it will be necessary for the Commission to obtain solid data, and not rely on a one-size-fits-all approach. While the FCC has said that a geographic market should be less than the entire state in size, it is clear that one of the goals of the Act is to encourage broad competition throughout the entire state. I conclude in my testimony that, for many reasons, it makes economic sense to view the market more broadly, and as a larger area, rather than a more confined area. In this context, the Commission might want to consider using LATA boundaries or Qwest's service area within the state as the defining characteristic of these impairment evaluation zones. Whatever geographic area the Commission ultimately settles on for its impairment analysis, it should not lose sight of the most important fact here: only UNE-P works at a scale and scope that is necessary to support mass market competition throughout New Mexico.

Fourth, I have provided an analysis to aid the Commission in determining the crossover point at which it makes more sense to utilize a DS1 application instead of "POTS" to serve a multi-line customer. I conclude there, for numerous

reasons, that the crossover point should be set at fourteen (14) lines, meaning that when a customer is served by fourteen or more lines, a CLEC should be economically indifferent between UNE-P or DS1 lines to serve that location.

Lastly, I have provided a fairly thorough examination of the so-called trigger analysis found in the *TRO*, where I have reached several important conclusions. Most importantly, the trigger analysis is intended to determine whether and to what extent there are *actual and effective* alternatives to the switching capability of the RBOC, in this case Qwest. This does not mean merely counting switches, but instead requires a careful analysis of economic and operational impairment in New Mexico, and the application of quantitative and qualitative criteria to determine which alternative switching sources should be considered in the trigger analysis. Next, I conclude that the Commission should look at "actual deployment," *i.e.*, the places and customers that a CLEC *currently* serves. which must include service to both residential and business customers. In addition, the qualified provider (whether a self-provider or a wholesaler) must be actually serving the *entire* geographic area at issue, and not just a subset of that market. And lastly in this regard, the Commission must assure itself that the trigger analysis has produced a rational and lasting pro-competitive result. A fundamental concern, and potential danger, is that the elimination of unbundled mass market switching will reverse the progress of competition, and force CLECs to exit the market.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF IMPLEMENTATION OF A BATCH CUT PROCESS	)	Case No. 03-00403-UT

AND

IN THE MATTER OF IMPAIRMENT IN ACCESS TO LOCAL CIRCUIT SWITCHING FOR MASS MARKET CUSTOMERS	)	Case No. 03-00404-UT

DIRECT TESTIMONY OF

WILLIAM H. LEHR

AND

LEE L. SELWYN

ON BEHALF OF

AT&T COMMUNICATIONS OF THE MOUNTAIN STATES, INC.

ECONOMIC CONSIDERATIONS

February 16, 2004

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In April 2000, my firm, Economics and Technology, Inc. ("ETI") was engaged by the New Mexico PRC to assist the Commission=s efforts to devise comprehensive new rules in response to the passage of House Bill No. 400 (2000 N.M. Laws, ch. 102). In that assignment, ETI provided assistance in developing draft and final rules in several related Commission proceedings, Utility Case Nos. 3237 (development of an expedited regulatory process), 3437 (consumer protection and quality of service standards), 3438 (infrastructure investment and the deployment of high-speed data services), and 3439 (accessibility of interconnection by competitive local exchange carriers). In connection with that assignment, I met with the Commission *en banc* in July 2000 to discuss the project and to respond to questions by the Commissioners.

A. Introduction, Purpose, and Structure of the Testimony.

Q. ON WHOSE BEHALF IS THIS TESTIMONY BEING OFFERED?

A. Our testimony is offered on behalf of AT&T Communications of the Mountain States, Inc. ("AT&T").

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of our testimony is to provide economic guidance to the Commission in interpreting and applying the FCC's recent *Triennial Review Order* ("*TRO*")[1] and "impairment standard" to determine which Unbundled Network Elements ("UNEs") should continue to be mandated under the Telecommunications Act of 1996. We focus

[1] *Report and Order and Order on Remand and Further Notice of Proposed Rulemaking*, In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Federal Communications Commission, CC Docket No. 01-338, (Released August 21, 2003.) ("TRO").

upon applying the impairment analysis to the case of unbundled switching for mass-market customers.

Q. PLEASE SUMMARIZE YOUR MAIN CONCLUSIONS.

A. Our testimony will explain why we reach the following primary conclusions:

(1) The principal goal of the Telecommunications Act of 1996 ("the Act")[2] is to establish effective competition in local telephone services. This coincides with the mission of this Commission to protect and promote consumer interests. Effective competition offers the best way to benefit consumers through lower prices, improved quality, and expanded choice, and to encourage appropriate investment in advanced communication services by providers in New Mexico. The goal of promoting effective competition ought to govern the determination of which UNEs to require.

(2) UNE-based competition, while still in its infancy, has played a critical role in the progress made to date in the emergence of effective local exchange competition. UNE-based competition, and in particular competition via UNE-P, has substantial consumer benefits.

(3) In order to produce economically rational results, the FCC's "impairment" standard must be applied in a manner that is consistent with a principal goal of the Act, to establish effective competition. In applying the impairment standard, states must consider which UNEs are necessary for additional Competitive Local Exchange Carrier ("CLEC") entry to be economically viable on a market-by-market basis. In the TRO, the FCC directs state commissions to make this

[2] 47 U.S.C. § 251 et. Seq.

assessment using a two-stage impairment analysis. The first stage of the impairment analysis involves a "trigger" test, which provides a regulatory short cut that looks at the status of actual non-UNE-based competition in order to infer an absence of entry barriers.[3] If the trigger test fails, then states are directed to conduct a more expansive investigation of the economic viability of potential non-UNE-based competition.[4] It is important that the Commission implement both elements of the impairment analysis in an economically sound manner in order to ensure that consumers will not be denied the benefits of local exchange competition.

(4) The FCC's trigger tests, which rely upon an examination of current ***actual*** CLEC competition without a particular UNE on a market-by-market basis, implies that if the number of CLECs offering service without use of that UNE exceeds the trigger threshold, then economic barriers to entry are presumed to be negligible. The role of a trigger test is twofold: first, it provides the basis for assessing the current state of competition which is useful in its own right and also helpful when subsequently evaluating the case for potential competition; and second, if the evidence of actual competition is sufficient, it provides a basis for concluding that CLECs would not be impaired without access to the UNE. When the trigger is satisfied, this avoids the burden of further analysis that could be associated with a more wide-ranging consideration of ***potential*** competition. However, both the trigger test and the more expansive investigation of potential competition are intended to result in consistent impairment findings. For the conclusion implied by nominal satisfaction of a trigger – *i.e.*, that economic barriers to entry are negligible – to be reasonable and consistent with sound economic analysis, the trigger must be applied with focus and care. Appropriate application of the impairment standard, including applying the trigger test, will depend critically

[3] TRO, ¶¶ 498-505.
[4] TRO, ¶¶ 506-520.

upon the quality of data collected, the appropriate definition of the markets, and the correct classification of CLEC competition.

(5) The focus of most of the debate in this proceeding and most of the discussion in this testimony will be on the need for unbundled switching for the mass market,[5] which is used primarily to serve residential and small business customers via the UNE Platform ("UNE-P"). Markets are generally defined with respect to services, customers, and geographic scope. The FCC has directed state commissions to evaluate impairment in the hypothetical absence of UNE-P in geographic areas that are smaller than the state as a whole, but leaves it to state commissions to determine the appropriate size of the geographic market.[6] An efficient CLEC will necessarily make market entry decisions and pursue mass market customers in a geographic area that is sufficiently large to permit the CLEC to realize the economies of scale and scope with respect to both network operations and "business" issues such as marketing, advertising, and customer support.

(6) CLEC competition is impaired as long as UNE-P is needed to ensure that CLEC competition is economically viable *throughout* the defined market.

Q. HOW IS THE REST OF YOUR TESTIMONY ORGANIZED?

A. The balance of this testimony is organized into four sections:

Section III explains the economic and policy context for this proceeding and how it relates to the pro-competitive framework put in place by the *Telecommunications Act of 1996*.

[5] Although the economic framework we present for applying the UNE standard applies to all UNEs, the UNE that this testimony focuses on is unbundled switching for the mass market. To simplify the discussion, we will refer to this simply as "unbundled switching" as short hand, and will add "for the mass market" only when we think additional clarification is necessary.

[6] TRO, ¶ 495.

Section IV provides an economic interpretation of the TRO's impairment standard, explaining how to evaluate economic barriers to entry. Additionally, this section explains the economic principles to be used when defining the scope of markets (which includes defining their geographic scope) and for purposes of assessing the business case for a qualified, efficient CLEC.

Section V explains the economic and policy role of the triggers and how they should be applied in the context of unbundled switching for the mass market.

Section VI concludes.

II. UNDERSTANDING THE ECONOMIC AND POLICY CONTEXT FOR THIS PROCEEDING.

A. Local Exchange Competition is Important to Consumers.

Q. WHAT IS THE ISSUE AT STAKE IN THIS PROCEEDING?

A. The principal goal of the *Telecommunications Act of 1996* ("the Act" or "Act") is to establish competition in local telephone and access markets. For robust local exchange competition to arise, it must be feasible for multiple CLECs to enter the market and to sustain and expand their market presence. The Act recognizes that it is necessary to adopt a pro-competitive framework that lowers regulatory and economic barriers to entry in order to enable the emergence of efficient and effective competition. The UNE rules are a critical component of this framework. These rules mandate that the Incumbent Local Exchange Carrier ("ILEC") make available for lease wholesale access to individual components (elements) of its local access network at nondiscriminatory, cost-based rates.

emergency services (E911). The fact that most cable providers do not yet offer telephony services, and when they do, do not choose to market it as a substitute for basic telephone service is indicative that these are not yet close substitutes for mass market, basic telephone service.

Q. ISN'T THERE A PROBLEM IN AN APPROACH THAT MIGHT EXCLUDE CLECS THAT DEMONSTRATE THE VIABILITY OF ECONOMIC ENTRY WITHOUT UNES?

A. No. The fact that a CLEC should not be counted toward the triggers does not end the impairment analysis; rather, it protects the regulatory process from being aborted prematurely. Failure to satisfy the trigger signifies only that the available data of actual competition is insufficient to make a reasonable inference about entry barriers. Common sense indicates that if you do not have reliable data to apply the test, you should move beyond the test to collect the necessary data to complete the appropriate analysis.

V. CONCLUSIONS.

Q. WHAT ARE YOUR PRINCIPAL RECOMMENDATIONS TO THE COMMISSION?

A. The goal of our direct testimony is to assist the Commission in interpreting the TRO and in adopting an appropriate economic framework for implementation of the impairment standard defined therein. Such a framework will ensure that the Commission's decisions in this proceeding will promote and protect the interests of all consumers in New Mexico. This is best accomplished by promoting the transition to efficient and sustainable

competition in local telephone services, a transition that depends on rigorous enforcement of the pro-competitive provisions of the Act.

It is now nearly eight years since the Act became law, and substantial progress has been made in transitioning local markets towards competition, but much more is yet to be done. The CLEC competition that is currently expanding throughout New Mexico depends critically upon the availability of UNEs. A careful analysis of the economics of CLEC entry will demonstrate the economic need for continuing mandatory UNE provisioning.

Denying CLECs continued access to UNEs will raise CLEC entry costs, thereby limiting CLEC expansion. Without the spur of competition, ILECs will have a reduced incentive to invest in advanced communications infrastructure. And, in those locales where CLECs are induced to expand investment to retain customers currently being served by UNE-P, there will be an increased and perverse risk of inefficient investment in legacy technology that will threaten both CLEC and ILEC capacity with stranding.

Consumers who benefit today and those that would be likely to benefit in the future from expanded CLEC competition will be denied the benefits of choice and enhanced efficiency that competition brings. Continued investment in advanced communications infrastructure would be put unnecessarily at risk.

The current proceeding offers a valuable opportunity to take stock of the progress in local telephone competition across New Mexico. To ensure that the Commission reaches decisions that are consistent with the Act and the TRO, it is necessary for it to apply the trigger test for unbundled switching to a suitably defined geographic area and to classify CLECs that are counted toward satisfying the trigger threshold appropriately. That said,

it is essential that the data underlying that analysis be collected on a wire-center basis so as to ensure that adequate data is assembled and analyzed.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF IMPLEMENTATION OF A BATCH CUT PROCESS	)	Case No. 03-00403-UT

AND

IN THE MATTER OF IMPAIRMENT IN ACCESS TO LOCAL CIRCUIT SWITCHING FOR MASS MARKET CUSTOMERS	)	Case No. 03-00404-UT

DIRECT TESTIMONY OF

ARLEEN M. STARR

ON BEHALF OF

AT&T COMMUNICATIONS OF THE MOUNTAIN STATES, INC.,

ESTABLISHING THE CROSS OVER POINT BETWEEN THE MASS MARKET AND THE ENTERPRISE MARKET

February 16, 2004

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and capital budgets. From 1986 to 1990, I held various positions in the Financial Regulatory Department in Chicago. My responsibilities included intrastate financial analysis and providing reports and data to the regulatory commissions in the Central Region. From 1992 to 1996, I worked in the product equipment business, with financial responsibilities in the product management, sales, and service areas. I assumed my current responsibilities in May of 1996.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide the Commission with the necessary information in order to conduct an examination of factors necessary in determining the so-called "cross over point" used to decide when it makes economic sense for a competitive local exchange carrier ("CLEC") to serve a multi-line plain old telephone service ("POTS") customer using a DS1 based service.

II. ESTABLISHING THE CROSS OVER POINT BETWEEN THE MASS MARKET AND THE ENTERPRISE MARKET

A. Summary

Q. WHAT IS THE CROSS OVER POINT THAT YOU RECOMMEND THIS COMMISSION ADOPT?

A. I recommend that the commission adopt a cross over point of 10 lines.

Q. HOW DID YOU ARRIVE AT THIS CONCLUSION?

A. I arrived at this conclusion by determining where it made economic sense for a CLEC to serve a multi-line POTS customer using a DS1 based service rather than

using UNE-P. In performing the analysis to arrive at that conclusion, I identified all of the costs that are incurred when serving a multi-line POTS customer with a DS1 based service and divided that total cost by the cost of a single UNE-P line. The result of that calculation rounded up to the next whole number is the cross over point.

B. Cross Over Point From Mass Market to Enterprise

Q. PLEASE IDENTIFY THE FUNDAMENTAL CROSS OVER POINT ISSUE THE FCC ASKED STATE COMMISSIONS TO ADDRESS.

A. The fundamental issue the FCC tasked the state commissions with addressing was how should the "mass market" be distinguished from the "enterprise market?"[1] The FCC identified the cross over issue in the section of the *TRO* that is concerned with defining the market.[2]

Q. DID THE FCC SUGGEST UNITS THAT COULD BE USED IN DISTINGUISHING THE MASS AND ENTERPRISE MARKETS?

A. Yes, it did. The FCC suggested that the number of DS0 lines a customer uses at a particular location would be an appropriate unit for the cross over analysis. Specifically, the FCC stated, "as part of the economic and operational analysis discussed below, a state must determine the appropriate cut-off for multi-line DS0

[1] *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, and Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket Nos. 01-338, 96-98 & 98-147, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, FCC 03-36, ¶ 497 (released Aug. 21, 2003) (*"Triennial Review Order"* or *"TRO"*).
[2] *Id.*, ¶¶ 495-497.

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customers as part of its more granular review."[3] The FCC asked the state commissions to identify the number of DS0 lines needed at a particular customer location before the customer crosses over from the mass market to the enterprise market.

Q. WHAT ARE THE CHARACTERISTICS OF MASS MARKET CUSTOMERS?

A. The mass market customer base is: (a) primarily interested in basic voice POTS service[4]; (b) widely geographically dispersed[5]; and (c) unaccustomed to complex or disruptive provisioning schemes.[6] The *TRO* recognizes each of these characteristics when it distinguishes mass market from enterprise customers. For purposes of the switching impairment analysis, the FCC stated "mass market customers are analog voice customers that purchase only a limited number of POTS lines, and can only be economically served via DS0 lines."[7] Mass market customers are not located exclusively in concentrated geographic locations such as central business districts; rather residential and small business customers are located across all urban, suburban, and rural locations. These customers expect that using their telephone services, as well as changing service providers, should

[3] *Id.*, ¶ 497.
[4] *Id.*
[5] *Id.*, ¶ 205.
[6] *Id*, n. 716.
[7] *TRO*, ¶ 497. *See also TRO*, ¶ 127 ("Mass market customers consist of residential customers and very small business customers. Mass market customers typically purchase ordinary switched voice service (Plain Old Telephone Service or POTS) and a few vertical features."

F. Conclusion

Q. WHAT ARE YOUR OVERALL CONCLUSIONS FOR THE CROSS OVER POINT?

A. When a fact-based, quantitative analysis is performed using cost information from this state, the point at which it is economically rational for a CLEC to use a DS1 based service is when a customer 10 or more lines. The evidence used to arrive at this conclusion is objective and quantitative and the analysis performed was granular, specific to this state and representative of how a CLEC would view a decision to serve a customer with UNE-P or a DS1 based service. As previously discussed, the Commission can easily use the analysis to calculate cross over points for whatever markets the Commission eventually identifies.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.